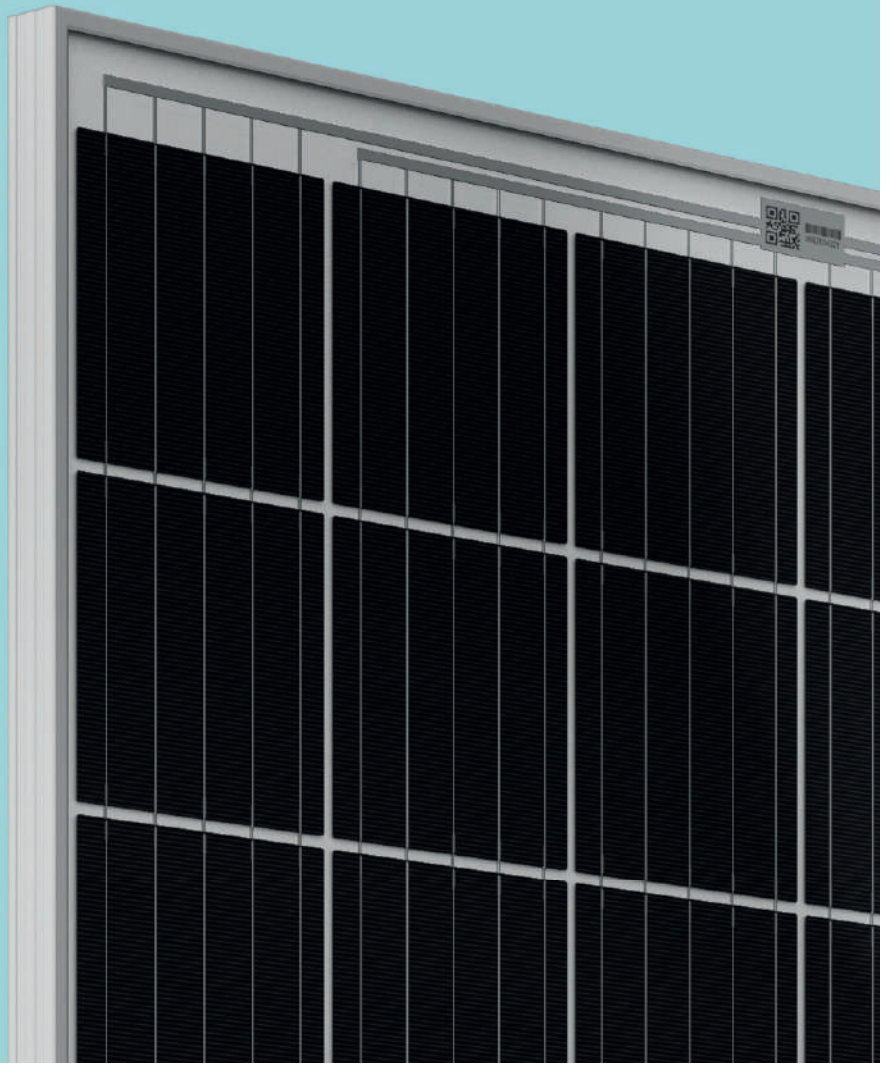


P23

320 - 330 W



QUALITY SIGNED AND SEALED



THE POWERFUL PROJECT MODULE

**25 YEAR PRODUCT GUARANTEE
OPTIONAL AVAILABLE**

60 CELLS



**12 YEARS PRODUCT GUARANTEE
UPGRADEABLE TO 25 YEARS AS A
PREMIUM OPTION**



**25 YEARS LINEAR
PERFORMANCE WARRANTY**



CRAFTED WITH PASSION



CONSTANTLY HIGH CELL QUALITY
through strict quality examinations
by high-resolution electroluminescence
measurements.
100% of diodes are tested.



- MADE IN GERMANY -

aleo solar module P23

| ELECTRICAL DATA (STC) | | P23L320 | P23L325 | P23L330 |
|-----------------------|---------------|---------|---------|---------|
| Rated power | P_{MPP} [W] | 320 | 325 | 330 |
| Rated voltage | V_{MPP} [V] | 32.8 | 33.0 | 33.3 |
| Rated current | I_{MPP} [A] | 9.75 | 9.85 | 9.93 |
| Open-circuit voltage | V_{OC} [V] | 40.3 | 40.5 | 40.7 |
| Short-circuit current | I_{SC} [A] | 10.22 | 10.31 | 10.39 |
| Efficiency | η [%] | 18.2 | 18.5 | 18.8 |

Electrical values measured under standard test conditions (STC): 1000 W/m²; 25°C; AM 1.5

| ELECTRICAL DATA (NMOT) | | P23L320 | P23L325 | P23L330 |
|------------------------|---------------|---------|---------|---------|
| Power | P_{MPP} [W] | 236 | 240 | 244 |
| Voltage | V_{MPP} [V] | 30.4 | 30.6 | 30.8 |
| Current | I_{MPP} [A] | 7.78 | 7.85 | 7.92 |
| Open-circuit voltage | V_{OC} [V] | 37.7 | 37.9 | 38.0 |
| Short-circuit current | I_{SC} [A] | 8.24 | 8.31 | 8.37 |
| Efficiency | η [%] | 16.8 | 17.1 | 17.4 |

Electrical values measured under nominal module operating temperature: 800 W/m²; 20°C; AM 1.5; wind 1 m/s; Module temperature NMOT : 44.5°C

| ELECTRICAL DATA (LOW IRRADIANCE) | | P23L320 | P23L325 | P23L330 |
|----------------------------------|---------------|---------|---------|---------|
| Power | P_{MPP} [W] | 62 | 63 | 64 |

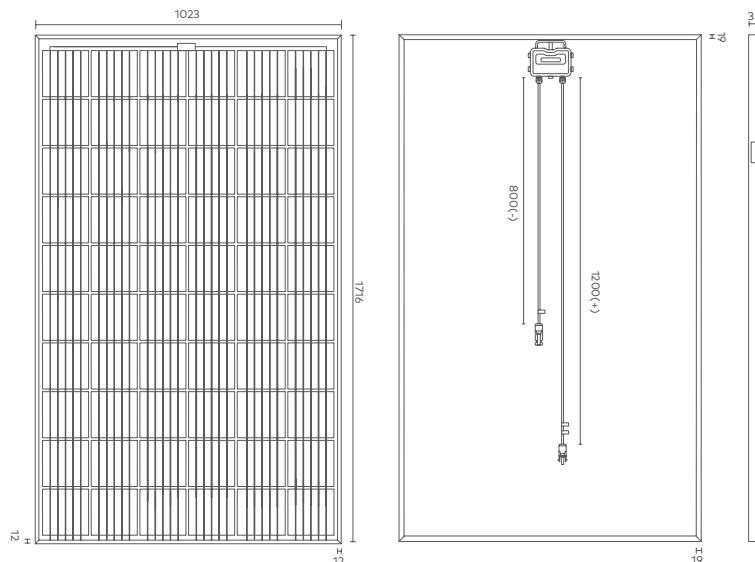
Electrical values measured under: 200 W/m²; 25°C; AM 1.5

| TEMPERATURE COEFFICIENTS | | | |
|-----------------------------------|--------------------|-------|-------|
| Temperature coefficient I_{SC} | $\alpha (I_{SC})$ | [%/K] | +0.05 |
| Temperature coefficient V_{OC} | $\beta (V_{OC})$ | [%/K] | -0.29 |
| Temperature coefficient P_{MPP} | $\gamma (P_{MPP})$ | [%/K] | -0.40 |

| BASIC DATA JUNCTION BOX | |
|-------------------------|---------------------------|
| Length x width x height | [mm] 148 x 123 x 27 |
| IP class | IP67 |
| Cable length | [mm] 1200 (+), 800 (-) |
| Connectors | Genuine MC4 (PV-KST4-EVO) |
| Bypass diodes | 3 |

| CLASSIFICATION | | P23L320 | P23L325 | P23L330 |
|--|-----|---------|---------|---------|
| Classification range (positive classification) | [W] | 0/+4.99 | 0/+4.99 | 0/+2.99 |

DIMENSIONS [mm]



| BASIC MODULE DATA | | |
|-------------------------|------|--------------------------|
| Length x width x height | [mm] | 1716 x 1023 x 35 |
| Weight | [kg] | 19.3 |
| Number of cells | | 60 |
| Cell size | [mm] | 158.75 x 158.75 |
| Cell material | | Monocrystalline Si, PERC |
| Number of bus bars | | 5 |
| Front sheet | | 3.2 mm Solar glass (TSG) |
| Back sheet | | Polymer sheet, white |
| Frame material | | Al alloy, silver |

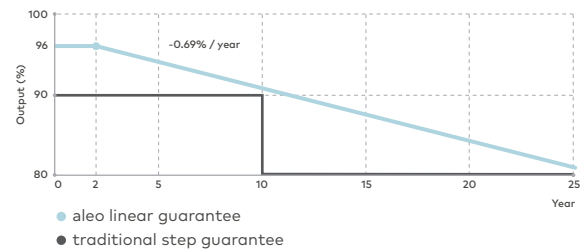
| CERTIFICATIONS AND GUARANTEES | |
|-----------------------------------|--------------------------------|
| Product Guarantee | 12 years, optional 25 years |
| Power Guarantee | 25 years – Linear |
| Fire Resistance | Class C |
| Protection Against Electric Shock | II |
| Certifications | IEC 61215:2016, IEC 61730:2016 |

| LOADS | | |
|---|--------------------|-------------------|
| Max. module pressure load (Testload) | [Pa] | 5400 ¹ |
| Max. module pressure load (Designload) ² | [Pa] | 3600 ¹ |
| Max. module suction load (Testload) | [Pa] | 2400 ¹ |
| Max. module suction load (Designload) ² | [Pa] | 1600 ¹ |
| Max. system voltage | [V _{DC}] | 1000 |
| Reverse current load | I_R [A] | 20 |

Mechanical load acc. to IEC/EN 61215:2016
¹ Please observe the mounting conditions in the installation manual
² Testload/ Safety factor 1.5 = Designload

Measurement tolerance of P_{MPP} under STC -3/+3% |
 Accuracy of other electrical values -10/+10%
 Efficiency relating to gross module area

PERFORMANCE GUARANTEE



PLEASE CONTACT YOUR AUTHORISED ALEO DEALER

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